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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,930	08/06/2001	Sanford Redmond	0645-4034US3	8711

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EXAMINER

NGUYEN, THUKHANH T

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 07/08/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

AS 10

Office Action Summary

Application No.

09/921,930

Applicant(s)

REDMOND, SANFORD

Examiner

Thu Khanh T. Nguyen

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20 and 25-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20 and 25-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 20, 29, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Sauer (4,130,387).

Sauer teaches an apparatus for thermoforming sheet material, comprising supplying means (90) for supplying of thermoplastic film, heating means (col. 4, line 10-12) for heating the film, a punch means (14) with a fault line forming portion (96), a female die (12) having a shoulder (50) and an accurately bored hole (48) which is aligned with the punch means; wherein the punch means has a first position (Fig. 3) in which it is not in contact with the film, and a second position (Fig. 4) in which it is fully advanced to press the film against the female die.

3. Claims 20, 25-30, 32-36, and 38-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Wade (3,703,255).

Wade teaches an apparatus for forming plastic container, comprising a supply of thermoplastic film (col. 5, lines 59-61; col. 6, lines 16-17), means to heat the film (col. 4, lines 16-19), punch means (40) with a lower section (42); a female mold (12) having a bore corresponding to the punch, an anvil with a flat end surface (14), a tripper plate (18), and a shoulder (Figs. 1-2, 27); wherein the punch means having a first position in which it is not in

Art Unit: 1722

contact with the film (Fig. 1) and a second position in which it is fully advanced against the film (Fig. 3).

The lower section of the punch means could be press into shoulder of the female mold to press onto the film to form indentation (fault line) or to punch through the film to separate the formed container from the film (col. 6, lines 25-27). The lower section of the punch means has a tapered surface, a frusto conical surface, a round – spherical surface (42). The stripper plate (18), which is part of the lower die, is spring loaded (20).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer ('387) as applied to claims 20, 29 and 32 above and further in view of Meadors (4,127,378).

Sauer discloses a thermoforming apparatus as described above, in which the female die, the sheet clamping means and the punch are movable by cylinders. But Sauer fails to disclose that springs can also be used.

Meadors discloses an apparatus for forming thermoplastic sheet, comprising a plurality of springs (38, 82; col. 3, lines 58-60) for moving a plunger (20) downwardly into the female die (col. 3, lines 22-34) and for moving the clamping means (80) upward to clamp the sheet material during the forming process (col. 4, lines 34-43).

Art Unit: 1722

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Sauer by providing a plurality of springs as taught by Meadors, because the springs would resist the sudden movement of the piston and would result in a smooth movement of the punch and the clamping means on the sheet material.

6. Claims 31, 37 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer or Wade as applied to claims 20, 25-30, 32-36, and 38-42 above, and further in view of Pearce et al (3,978,705).

Sauer and Wade discloses apparatus for forming container from sheet material as described above, but these references fail to disclose a micrometer punch adjustment means for controlling the advancement of the punch.

Pearce discloses an apparatus for forming a thin sheet orifice plate, comprising a punch (178) corresponding to a chuck assembly (174) for reshaping the orifice plate blank (111); in which the punch (178) having a micrometer adjustment mechanism (181) for controlling the depth of penetration of the punch (col. 12, lines 13-43).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Sauer or Wade by providing a punch adjustment mechanism as taught by Pearce because the adjustment mechanism would control the depth of penetration of the punch, or the male mold, into the female mold in order to form an indentation (fault line) on the product so that it could be trimmed from the film later, or in order to remove the product from the film if the male mold penetrate through the thickness of the film.

Response to Arguments

7. Applicant's arguments filed April 21, 2003 have been fully considered but they are not persuasive.

The Applicant argued that the prior art fails to disclose that the punch is advance so that the base of the punch could form with a shoulder of the female mold a distance that is less than the thickness of the film.

However, this is the intended use of the apparatus, which does not further define the structure of the apparatus. Depending on how much the punch advances into the female mold, it could form a cutting mark so that the product could be trimmed from the film material at a later station; or it could separate the product from the film right at the forming station if it penetrates through the thickness of the film. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device *is*, not what a device *does*." Hewlett- Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (Emphasis in original)

Sauer and Wade disclose thermoforming apparatuses for forming plastic sheet into containers, comprising a male punch with a base (fault line forming portion), and a female die with a shoulder which is pressed against the base of the male mold. Wade further discloses the base having different-shape sections and in which the product could be removed from the sheet at a trimming station or at the forming station by punching the punch right through the sheet (col. 6, lines 21-27).

Pearce discloses an apparatus for reshaping a sheet material, including a punch adjustment means for controlling the movement of the punch penetrating through the sheet material and into the die member (col. 12, lines 13-43).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to improve the performance of Wade and Sauer's apparatus by providing a punch adjustment means as disclosed by Pearce, so that the movement of the punch could accurately be controlled.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1722


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 703-305-7167.

The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

TN
June 27, 2003


ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300 1722
6/27/03